

THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

- Adda*
1. A method of monitoring a patient under medical care, comprising the steps of providing a sensor arrangement which is arranged to detect motion of the patient, monitoring the motion of the patient by way of the sensor arrangement, determining whether the motion is indicative of patient arousal, and providing an alarm should the motion be indicative of patient arousal.
 2. A method in accordance with claim 1, wherein the sensor arrangement is arranged to be responsive to bodily motion of the patient, and when the motion of the patient increases beyond a predetermined threshold indicative of patient arousal, the alarm is provided.
 3. A method in accordance with claim 2, wherein the sensor arrangement is also arranged to monitor the respiratory motion of the patient.
 4. A method in accordance with any one of claims 1, 2 or 3, wherein the sensor arrangement includes a pad on which the patient lies, the pad mounting a sensor for monitoring motion of the patient.
 5. A method in accordance with any one of the preceding claims, further comprising the step of providing an alarm should the motion of the patient cease to be detected.
 6. A method in accordance with claim 5, further comprising the step of providing an alarm should the motion of the patient fall below a predetermined value.
 7. A method in accordance with any preceding claim, further comprising the step of monitoring the body temperature of the patient and providing an alarm should the body temperature rise above or below predetermined values.
 8. A method in accordance with claim 7, wherein a temperature sensor is provided proximate or within the patient to constantly monitor the temperature.
 9. A method in accordance with claim 8, wherein a control means is arranged to receive signals from the sensor arrangement and temperature sensor, and process those signals to provide the alarms.
 10. A method in accordance with claim 9, wherein the control means is provided housed in a single unit.
 11. A method in accordance with any preceding claim, wherein the patient is an animal.

12. A method in accordance with claim 11, wherein the animal is monitored during recovery from anaesthesia or when under sedation.

13. A method in accordance with any preceding claim, wherein the patient is a human.

14. A method in accordance with claim 2, comprising the step of assessing a baseline motion rate which corresponds to the motion rate of the patient at the time the baseline assessment is made, and setting the predetermined threshold at a predetermined rate above the baseline level.

15. A method in accordance with claim 4, comprising the further step of providing a separate respiratory motion arrangement for measuring respiratory motion of the patient, and comparing a signal from the respiratory motion sensor with the signal from the pad sensor, to obtain an indication of bodily motion of the patient.

16. A device for monitoring a patient under medical care, comprising a sensor arrangement which is arranged to detect motion of the patient, and a control means which is arranged to process signals received from the sensor arrangement to determine whether the motion is indicative of patient arousal, and to provide an alarm should the detected motion be indicative of patient arousal.

17. A device in accordance with claim 16, wherein the sensor arrangement is arranged to detect bodily motion of the patient, and the control means is arranged to provide an alarm when the motion of the patient increases beyond a predetermined threshold.

18. A device in accordance with claim 17, wherein the sensor arrangement is also arranged to detect motion due to respiration of a patient.

19. A device in accordance with any one of claims 16 to 18, wherein the sensor arrangement includes a pad on which the patient lies, the pad mounting a sensor for monitoring motion of the patient.

20. A device in accordance with any one of claims 16 to 19, wherein the control means is also arranged to process the signals from the motion monitor to determine whether the motion of the patient has ceased and to produce an alarm if the motion of the patient ceases.

21. A device in accordance with claim 20, wherein the device is arranged to provide an alarm should the signal indicate that the motion of the patient has fallen below a

predetermined level.

22. A device in accordance with claim 21 including input means enabling the predetermined level to be set.

23. A device in accordance with any one of claims 16 to 22, the control means being automatically arranged to provide default settings for the predetermined level.

24. A device in accordance with any one of claims 16 to 23, including a baseline set means, which when actuated presets a baseline motion rate which corresponds to the motion rate of the patient at the time the baseline set function is actuated, the predetermined level being taken from the baseline level.

25. A device in accordance with any one of claims 16 to 24, wherein the control means is arranged to receive input from a temperature sensor sensing the body temperature of the patient, and is arranged to provide an alarm should the patient's body temperature fall outside predetermined values.

26. A device in accordance with any one of claims 16 to 21, adapted for use with animal patients.

27. A device in accordance with claim 26, wherein the control means and a display for providing visual indication of patient parameters are mounted in a housing which is adapted to be mounted to a cage for containing the animal patient.

28. A device in accordance with any one of claims 16 to 25, wherein the device is adapted for a human patient.

29. A device in accordance with any one of claims 19 to 28, comprising a further sensor arrangement for monitoring respiratory motion of the patient, the control means being arranged to compare the signal from the further sensor arrangement and the signal from the sensor arrangement, to give an indication of the bodily motion of the patient.

30. A system for monitoring animal patients recovering from anaesthesia, comprising a plurality of devices in accordance with any one of claims 26 to 29, the sensor arrangement being mounted in each case in a cage for retaining an animal recovering from anaesthesia.

31. A method of monitoring a patient under medical care, comprising the steps of providing a sensor arrangement which is arranged to detect motion of the patient, monitoring the motion of the patient by way of the sensor arrangement, and analysing the motion of the patient to determine the medical condition of the patient.

32. A method in accordance with claim 31, wherein the step of analysing the motion of the patient involves tracking the rate of motion over a period of time.

33. A method in accordance with claim 32, comprising the further step of applying trend analysis to monitor trends in the motion of the patient.

34. A method in accordance with any one of claims 31, 32 or 33, wherein bodily motion of the patient is monitored.

035. A method in accordance with any one of claims 31 to 34, wherein respiratory motion of the patient is monitored.

036. A method in accordance with any one of claims 31 to 35, wherein the step of analysing the motion of the patient is arranged to determine whether or not the patient is displaying signs of painfulness.

37. A device for monitoring a patient under medical care, comprising a sensor arrangement which is arranged to detect motion of the patient, and a control means which is arranged to process signals received from the sensor arrangement to analyse the motion of the patient, whereby to enable a determination of the medical condition of the patient.

38. A device in accordance with claim 37, arranged to output a graphical output which indicates the rate of motion over a time period of the patient, which can be used to analyse the medical condition of the patient.

39. A device in accordance with claim 37 or claim 38, the sensor arrangement being arranged to monitor bodily motion of the patient.

040. A device in accordance with any one of claims 37, 38 or 39, wherein the sensor arrangement is arranged to monitor respiratory motion of the patient.

041. A device in accordance with any one of claims 37 to 40, wherein the device is arranged to process the signals to analyse the motion of the patient to determine whether or not the patient is displaying signs of painfulness.

42. A method in accordance with any one of claims 1 to 15 or 31 to 36, comprising the further step of controlling a peripheral device depending upon the motion of the patient.

43. A device in accordance with any one of claims 15 to 29 or 37 to 40, further comprising means for controlling a peripheral device depending upon the motion of the patient.

45. A device in accordance with claim 44, the control means being arranged to a peripheral unit depending upon the temperature of the patient.

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